

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : HIERTZ, et al.
Serial No. : 10/561,457
Confirmation No. : 8227
Filing Date : January 10, 2008
Group Art Unit : 2617
Examiner : Yu (Andy) Gu
Attorney Docket No. : DE 030227

**REPLY BRIEF
On Appeal from Group Art Unit 2617**

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Sir:

In addition to the arguments presented in the Appeal Brief filed January 18, 2010, and in response to the Examiner's Answer ("Answer") dated April 26, 2010, Appellants submit the following reply.

REMARKS

This Reply Brief is in response to the Examiner's Answer dated April 26, 2010.

Reconsideration of this application is respectfully requested in view of the arguments contained in the Appeal Brief filed on January 18, 2010, prior responses and the following remarks.

STATUS OF CLAIMS

- a) Claims 1-25 are pending at the time of filing the appeal brief.
- b) Claims 1, 17, and 25 are independent.
- c) Claims 1-25 stand rejected and are the subject of this appeal.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Whether claims 1-16 and 25 are properly rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.
- B. Whether claims 1-4, 8-11, 13, and 25 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill et al. (US Patent No. 6,404,756, hereinafter "Whitehill") in view of Giles et al. (US Patent No. 5,231,634, hereinafter "Giles") and further in view of He (US Patent No. 5,734,898, hereinafter "He").
- C. Whether claims 17 and 18 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles.
- D. Whether claims 5, 6, and 12 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles and He, and further in view of Matsunaga et al. (US Patent No. 6,704,932, hereinafter "Matsunaga").

- E. Whether claims 19 and 20 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles and further in view of Matsunaga.
- F. Whether claim 7 is properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles and He, and further in view of Shaffer et al. (US Patent No. 5,960,001, hereinafter “Shaffer”).
- G. Whether claim 21 is properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles, and further in view of Shaffer.
- H. Whether claims 14 and 15 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles and He, and further in view of Han et al. (US Patent No. 5,633,911, hereinafter “Han”).
- I. Whether claims 22 and 23 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles, and further in view of Han.
- J. Whether claim 16 is properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles and He, and further in view of White et al. (US Patent No. 7,433,691, hereinafter “White”).
- K. Whether claim 24 is properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles, and further in view of White.

ARGUMENT IN RESPONSE TO THE EXAMINER'S ANSWER

Appellants respectfully respond to the Examiner's Answer ("Answer") below.

A. Claims 1-16 and 25 are not properly rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

On page 2 of the Answer, the Examiner withdraws the rejection to claims 1-16 and 25 under 35 U.S.C. 112.

B. Claims 1-4, 8-11, 13, and 25 are not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill in view of Giles and further in view of He.

B1: Claim 1

Appellants respectfully maintain that the Examiner has failed to establish a case of obviousness, as is required under 35 U.S.C. 103(a).

Appellants' claim 1 defines a method of decentralized medium access control in a communications network consisting of a plurality of stations, wherein a sending station transmits a reservation request for a future transmission to an intended receiving station, the intended receiving station being in a reception range of the sending station, and requires:

transmitting the reservation request signaling reservation information including a starting point and duration of the future transmission, thereby defining a time period of the future transmission, and, in case of a multi-channel system, further including a frequency or code of the channel of the future transmission, thereby establishing a reservation. . . . Emphasis added.

On page 4 of the Answer, the Examiner concedes that Whitehill "does not specifically disclose *thereby establishing a reservation* . . . "

However, starting at the bottom of page 4 through the middle of page 5 of the Answer, the Examiner alleges that He at col. 9, lines 42-52 and col. 1, lines 36-44 discloses a communication protocol wherein a request for update is sent to a destination station by a source station, wherein the source station proceeds to the next process without needing a response message, such as an acknowledgement message, from the destination station. The Examiner alleges that it would have been obvious to one of ordinary skill to modify Whitehill by removing the CTS message in the reservation creation process for the purpose of further alleviating traffic congestion. Appellants respectfully assert that He is non-analogous art and is therefore an invalid reference under 35 U.S.C. 103(a).

In the “Response to Argument” section starting on page 18 of the Answer, the Examiner asserts that the He reference is analogous and applicable in the rejection of claim 1. Appellants respectfully disagree and submit that He is non-analogous art. He relates generally to a computer communication system which transmits an update request from one terminal to another, and more specifically, to a method for updating cache in a client-server computer system. He at col. 9, lines 42-52 identifies an asynchronous update processing mechanism where a client computer can proceed to the next process without waiting for the server computer to respond. At col. 1, lines 36-44, He addresses a problem with the synchronous method, in that parallelism in processing is restricted and that the requirement of sending responses adds to congestion in the communication line. On page 19 of the Answer, the Examiner maintains that He is from the same problem solving area as Appellants’ claim 1 because it is “obvious to borrow features from a different art, but [from the] same problem solving area.” Appellants respectfully maintain that He and Appellants’ claim 1 do not share the same problem area. Therefore, Appellants

respectfully submit that He is non-analogous art and as such is an invalid reference under 35 U.S.C. 103(a).

The problem solving area of He is distinguished from that of Appellants' claim 1 because He relates to reducing congestion in a communication line between a client computer and a server computer, whereas an example embodiment of Appellants' claim 1 overcomes the disadvantages of the standard IEEE 802.11 protocol with regard to collision avoidances. Appellants respectively submit that a person having ordinary skill in the art will recognize that a problem in the area of congestion in a connection between a client-server computer system is not within the same problem area as that of collision avoidance within the IEEE 802.11 wireless networking protocol. A client-server computer system is a distributed application structure that partitions tasks between a server computer and a client computer. He at col. 1, lines 20-26 discloses that the clients and servers are connected with a communication line such that a client will read and process an object from the server through the communication line. He addresses the problem of congestion within the communication line by disclosing a method for updating the cache memory in each client and server for reducing the line traffic and disk access. This embodiment of He allegedly enables a client computer to perform a cache memory update without waiting for the server computer to respond with an acknowledgement message.

Although He discloses a method for a client to proceed to the next process without waiting for the server to respond with an acknowledgement, Appellants respectfully submit that this is not reasonably related to nor pertinent to the problem of collisions on a wireless medium within the IEEE 802.11 protocols. It is well known by those of ordinary skill in the art that the 802.11 Standard covers the MAC and Physical layer with defined frame types for transmitting packetized data. An example embodiment of Appellants' features in claim 1 is explained on

page 5, lines 14-31 of Appellants' specification as originally filed, in which reservation information may be included in either the frame body or in the frame header. An optional field informs other stations about future reservations, which allows a station to make a reservation by a single reservation packet. As explained on page 4, lines 13-18 of Appellants' specification, these example embodiments enable the resolution of collisions of reservation requests.

It is respectfully submitted that the problems addressed by He are not reasonably pertinent to the problems with which Appellants are concerned. For the reasons pointed out above, the problems that are addressed by Appellants, which involve collisions on a wireless medium within the IEEE 802.11 wireless network packet frame protocols, is distinct from the problems that are addressed by He, which concern the congestion in a communication line between a client and a server. Therefore, Appellants respectfully maintain that He is not analogous prior art and therefore He is not a valid reference under 35 U.S.C. 103.

Because Whitehill, Giles and He, separately or in combination, do not disclose or even suggest all elements in claim 1 and because He is non-analogous art, Appellants respectfully submit that the Examiner has not presented a *prima facie* case of obviousness and as such, the rejection to independent claim 1 under 35 U.S.C. 103(a), is unfounded and should be reversed. As such, Appellants respectfully submit that claim 1 is in condition for allowance.

In addition, on page 20 of the Answer, the Examiner alleges that Appellants' claimed feature of "thereby establishing a reservation" is not a positive limitation carrying patentable weight. Appellants respectfully traverse this argument.

MPEP 2111.01 (III) recites, "plain meaning refers to the ordinary and customary meaning given to the term by those of ordinary skill in the art." See also *Phillips v. AWH Corp*, 415 F.3d 1303, 1313 (Fed. Cir. 2005)(*en banc*). Appellants respectfully submit that the plain meaning of

the features of claim 1 are such that a person of ordinary skill in the art would allow patentable weight to the term “thereby establishing a reservation.”

Whitehill at column 6, lines 8-29, discloses that a reservation is established only after receiving an acknowledgement message. As is clear throughout Whitehill, the reservation is based on a RTS/CTS exchange within the IEEE 802.11 protocol (also see col. 6, lines 56-60; col. 8, lines 61 to col. 9, line 20; col. 11, lines 17-48). However, in contrast to Whitehill, Appellants’ claim 1, which requires “. . . transmitting the reservation request signaling reservation information . . . thereby establishing a reservation. . . .” In other words, the plain meaning of Appellants’ claim 1 is distinguished from Whitehill because in claim 1 a reservation is established after transmitting a reservation request whereas in Whitehill, a reservation is established only after request is transmitted and the acknowledgement is received. Clearly the conditions for establishing a reservation are different between Whitehill and Appellants’ claim 1. Accordingly, the phrase “thereby establishing a reservation” should be afforded patentable weight.

Because Whitehill, Giles and He, separately or in combination, do not disclose or even suggest all elements in claim 1 and because He is non-analogous art, Appellants respectfully submit that the Examiner has not presented a *prima facie* case of obviousness and as such, the rejection to independent claim 1 under 35 U.S.C. 103(a), is unfounded and should be reversed. As such, Appellants respectfully submit that claim 1 is in condition for allowance.

B2. Claims 2-4 and 8-13

Claims 2-4 and 8-13 ultimately depend from claim 1. Each dependent claim incorporates all of the features of the allowable base claim 1. Furthermore, each dependent claim includes

additional distinguishing features. For each dependent claim Appellants essentially repeat the above arguments from claim 1 and apply them to each dependent claim. As such, Appellants respectfully submit that claims 2-4 and 8-13 are allowable at least by virtue of their dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claims 2-4 and 8-13 are in condition for allowance.

B3. Claim 25

Independent claim 25, is different from claim 1, however, claim 25 recites in part: “a reservation request for a future transmission to an intended receiving station, thereby establishing a reservation.”

The Examiner uses substantially the same arguments as set forth with regard to claim 1, alleging that Whitehill discloses the above-mentioned aspects of claim 25. Appellants essentially repeat the above relevant arguments for claim 1 and apply them to claim 25. As such, Appellants submit that the Examiner has not presented a prima facie case of obviousness and the rejection to independent claim 25 under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claim 25 is in condition for allowance.

C. Claims 17 and 18 are not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill in view of Giles.

C1. Claim 17

Independent claim 17, although different from claim 1, includes several similar distinguishing features as discussed above with respect to claim 1. For example, claim 17 is

directed to a communications network, and recites in part: “an intended receiving station, being in a reception range of the sending station, for receiving the reservation request to establish a reservation,” and “stations, other than the intended receiving station, active in the reception range which overhear the reservation request, for storing the reservation information locally and deferring from medium access during the time period and on the channel of the future transmission.”

The Examiner uses substantially the same arguments as set forth with regard to claim 1, alleging that Whitehill discloses the above-mentioned aspects of claim 17. Appellants essentially repeat the above relevant arguments for claim 1 and apply them to claim 17. Giles does not cure the deficiencies of Whitehill with respect to claim 17. As such, Appellants submit that the Examiner has not presented a *prima facie* case of obviousness and the rejection to independent claim 17 under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claim 17 is in condition for allowance.

C2. Claim 18

Claim 18 depends from claim 17 and incorporates all of the features of the allowable parent claim. Furthermore, dependent claim 18 includes additional distinguishing features. For claim 18 Appellants essentially repeat the above arguments from claim 17 and apply them to claim 18. As such, Appellants respectfully submit that claim 18 is allowable at least by virtue of its dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claim 18 is in condition for allowance.

D. Claims 5, 6, and 12 are not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill in view of Giles and He, and further in view of Matsunaga.

D1. Claims 5, 6, and 12

Claims 5, 6, and 12 depend from claim 1. Each dependent claim incorporates all of the features of claim 1. Furthermore, each dependent claim includes additional distinguishing features. For each dependent claim Appellants repeat the above arguments from claim 1 and apply them to each dependent claim. Matsunaga does not cure the deficiencies of Whitehill, Giles, or He with respect to claim 1. As such, Appellants respectfully submit that claims 5, 6, and 12 are allowable at least by virtue of their dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claims 5, 6, and 12 are in condition for allowance.

E. Claims 19 and 20 are not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill in view of Giles and further in view of Matsunaga.

E1: Claims 19 and 20

Claims 19 and 20 depend from claim 17 and incorporate all of the features of claim 17. Furthermore, each dependent claim includes additional distinguishing features. For each dependent claim Appellants essentially repeat the above arguments from claim 17 and apply them to each dependent claim. Matsunaga does not cure the deficiencies of Whitehill or Giles with respect to claim 17. As such, Appellants respectfully submit that claims 19 and 20 are allowable at least by virtue of their dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claims 19 and 20 are in condition for allowance.

F. Claim 7 is not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill in view of Giles and He, and further in view of Shaffer.

F1. Claim 7

Claim 7 depends from claim 1 and incorporates all of the features of claim 1.

Furthermore, claim 7 includes additional distinguishing features. For dependent claim 7 Appellants repeat the above arguments from claim 1 and apply them to claim 7. Shaffer does not cure the deficiencies of Whitehill, Giles, or He with respect to claim 1. As such, Appellants respectfully submit that claim 7 is allowable at least by virtue of its dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claim 7 is in condition for allowance.

G. Claim 21 is not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill in view of Giles, and further in view of Shaffer.

G1. Claim 21

Claim 21 depends from claim 17 and incorporates all of the features of the allowable claim 17. Furthermore, claim 21 includes additional distinguishing features. For dependent claim 21 Appellants repeat the above arguments from claim 17 and apply them to claim 21. Shaffer does not cure the deficiencies of Whitehill or Giles with respect to claim 17. As such, Appellants respectfully submit that claim 21 is allowable at least by virtue of its dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claim 21 is in condition for allowance.

H. Claims 14 and 15 are not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill, Giles and He, and further in view of Han.

I1. Claims 14 and 15

Claims 14 and 15 depend from claim 1. Each dependent claim incorporates all of the features of claim 1. Furthermore, each dependent claim includes additional distinguishing features. For each dependent claim Appellants essentially repeat the above arguments from claim 1 and apply them to each dependent claim. Han does not cure the deficiencies of Whitehill, Giles, or He with respect to claim 1. As such, Appellants respectfully submit that claims 14 and 15 are allowable at least by virtue of their dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claims 14 and 15 are in condition for allowance.

I. Claims 22 and 23 are not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill in view of Giles, and further in view of Han.

I1: Claims 22 and 23

Claims 22 and 23 depend from claim 17 and incorporates all of the features of the allowable claim 17. Furthermore, each dependent claim includes additional distinguishing features. For each dependent claim Appellants essentially repeat the above arguments from claim 17 and apply them to each dependent claim. Han does not cure the deficiencies of Whitehill or Giles with respect to claim 17. As such, Appellants respectfully submit that claims 22 and 23 are allowable at least by virtue of their dependency on an allowable base claim and

that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claims 22 and 23 are in condition for allowance.

J. Claim 16 is not properly rejected under 35 U.S.C. 103(a) as unpatentable over Whitehill, Giles and He, and further in view of White.

J1. Claim 16

Claim 16 depends from claim 1 and incorporates all of the features of claim 1. Furthermore, claim 16 includes additional distinguishing features. For claim 16 Appellants repeat the above arguments from claim 1 and apply them to claim 16. White does not cure the deficiencies of Whitehill, Giles, or He with respect to claim 1. As such, Appellants respectfully submit that claim 16 is allowable at least by virtue of its dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed. Accordingly, Appellants respectfully submit that claim 16 is in condition for allowance.

K. Claim 24 is not properly rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill, Giles, and White.

K1. Claim 24

Claim 24 depends from claim 17 and incorporates all of the features of claim 17. Furthermore, claim 24 includes additional distinguishing features. For claim 24 Appellants repeat the above arguments from claim 17 and apply them to claim 24. White does not cure the deficiencies of Whitehill or Giles with respect to claim 17. As such, Appellants respectfully submit that claim 24 is allowable at least by virtue of its dependency on an allowable base claim and that the rejection under 35 U.S.C. 103(a), is unfounded and should be reversed.

Accordingly, Appellants respectfully submit that claim 24 is in condition for allowance.

CONCLUSION

In light of the above, Appellants respectfully submit that the rejection of claims 1-25 is in error, legally and factually, and must be reversed.

Respectfully submitted,

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